

NEW *SCLEROCACTUS* (CACTACEAE) FROM NEVADA

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ABSTRACT.— Described is *Sclerocactus blainei* Welsh & Thorne, sp. nov. from Nye County, Nevada.

Studies of rare plant species in portions of Nevada were undertaken in 1980 when many of the valleys were under consideration as possible sites for location of long-range guided missile launching sites. The studies yielded many records of rare plant species, among them specimens identified initially as *Sclerocactus polyancistrus* (Engelm. & Bigel.) Britt. & Rose. Specimens were discovered by members of two field crews 3 and 4 June in Railroad, Ralston, and Hot Creek valleys. Three separate discoveries were made, including a mature plant in full flower, a juvenile plant, and a moderately mature, fruiting plant with 5 large, whorled stems around a dead base of a mature plant. The extent of the known range exists along a northeast-southwest axis of more than 160 km. The collecting crews consisted of Kaye Hugie Thorne and Blaine Tree Welsh in Railroad Valley and Dr. Elizabeth Neese and Susan White in Ralston and Hot Creek valleys.

Revision of the Cactaceae for the flora of Utah (Welsh 1984) stimulated examination of Nevada materials as well. It became apparent that the materials from Nye County matched neither the large-flowered specimens with numerous glabrous, long, central spines from Esmerelda and southern Nye counties designated as *S. polyancistrus* nor the small-flowered specimens of *S. pubispinus* (Engelm.) L. Benson with fewer central spines and puberulent juvenile or even mature spines from eastern White Pine County. They were remarkable in sharing some features of both the extreme types. However, the plants were intermediate in such features as central spine number. Thus, the unique combination of

characteristics dictated that the plants require formal taxonomic recognition.

Sclerocactus blainei Welsh & Thorne, sp. nov. Plantis similis *Sclerocactus pubispinus* (Engelm.) L. Benson sed in spinis pubescentibus et floribus majoribus differt et similis *Sclerocactus polyancistro* (Engelm. & Bigel.) Britt. & Rose in staturis et floribus sed in spinis paucioribus, brevioribus, et pubescentibus (inter alia) differt.

TYPE.— USA: Nevada: Nye Co., T10N, R58E, 1.6 km NE of Currant, 1617 M elev, 23 May 1981, S. L. Welsh 20580 (Holotype BRY).

Plants solitary or sometimes colonial, depressed-hemispheric, obovoid, ovoid, or cylindrical, 3–15 cm tall or more; ribs mainly 6–12, tuberculate; areoles circular to elliptic, villous, juvenile spines and often mature ones (in part) densely to sparingly white-puberulent to villous, finally glabrate; central spines 1–6, some or all of them hooked, mainly 1.8–5.5 cm long, straight or curved, the upper central spine (at least) usually pale and flattened (or trigonous) and more or less ribbon-like, 0.5–6 cm long, 1–1.8 (2.1) mm wide, erect; radial spines 10–16 or more; flowers 8–10 cm long in anthesis; sepals greenish, margined with rose-purple; petals pink or violet; fruit immature, green, not scaly; seeds unknown.

ADDITIONAL SPECIMENS.— Nevada. Nye Co., same locality and another bud of the same plant as the type, 3 June 1980, K. H. Thorne and B. T. Welsh 960A (BRY); Nye County, T2N, R45E, 1830 m elev, 4 June 1980, E. Neese & S. White 8872 (BRY, and 3 duplicates distributed previously as S.

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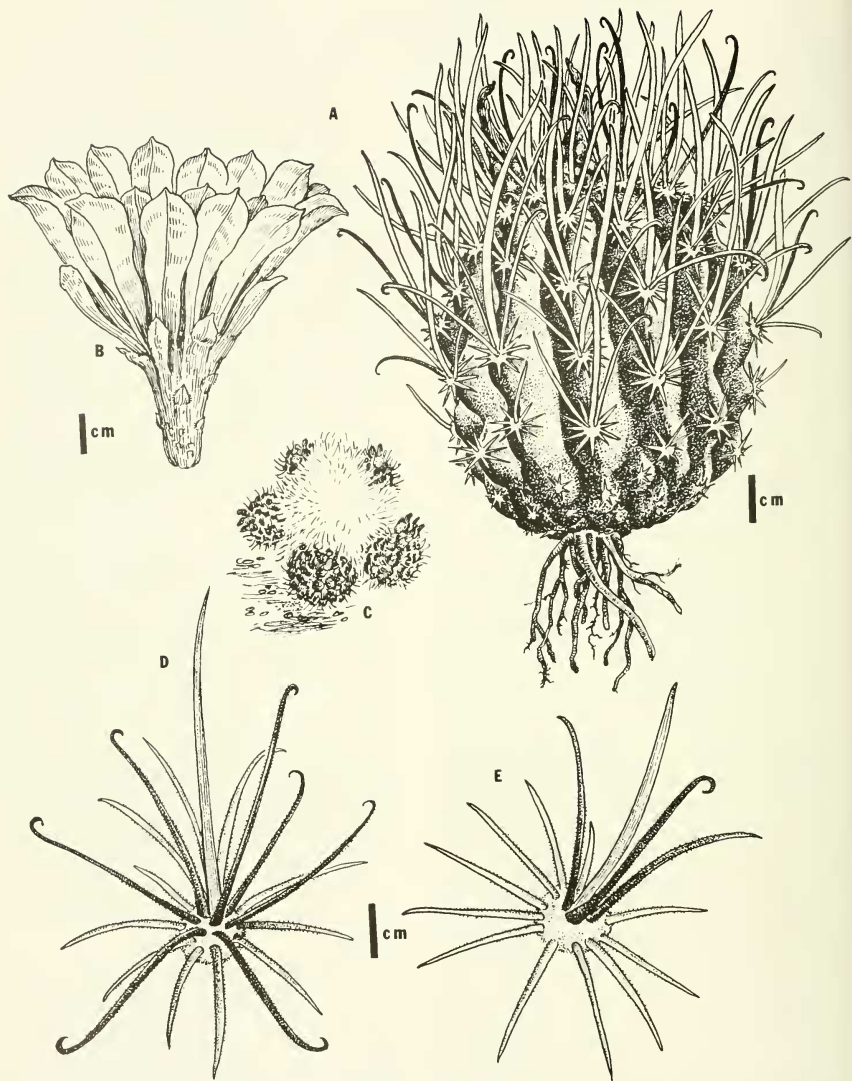


Fig. 1. *Scleroactus blainei* Welsh & Thorne. A. Detail of the plant. B. Flower. C. Habit of the type specimen, with five buds surrounding the base of a single dead stem. D. Detail of spines at an areole on a mature plant. E. Detail of an areole on an immature plant.

polyancistrus; T4N, R51E, 4 June 1980, E. Neese & S. White 8857 (BRY, a juvenile plant).

The plants grow in greasewood, galleta, rabbitbrush, shadscale, and sagebrush communities at 1586 to 1830 m elevation in limestone and igneous gravel with a clay matrix.

REFERENCES

- BENSON, L. 1982. The Cacti of the United States and Canada. Stanford University Press, California. 1044 pp.
- WELSH, S. L. 1984. Utah flora: Cactaceae. Great Basin Nat. 44:52-69.